

**We claim:**

1. A method for producing lightweight concrete composition wherein foamed plastic balls or particles obtained by grinding foamed plastic waste material are mixed with cement, characterized by that the plastic particles are mixed with water, soluble glass and polyvinyl acetate, and to the mixture, cement is batched in two stages.
2. The method as claimed in Claim 1, wherein cement slurry is prepared first in the mixer with the known aggregates, and then the plastic particles are added to this slurry.
3. The method as claimed in Claim 1, wherein the mixture of cement slurry and the aggregates is poured into a mold and then is pressed to a 65-70% of its original volume.
4. The method as claimed in Claim 2, wherein the mixture of cement slurry and the aggregates is poured into a mold and then is pressed to a 65-70% of its original volume.
5. The method as claimed in Claim 1, wherein after drying, the surfaces adjoining the mold walls are cut off and a construction material of homogenous strength is manufactured by sawing, milling and drilling to provide optional forms of the constructed material.
6. The method as claimed in Claim 2, wherein after drying, the surfaces adjoining the mold walls are cut off and a construction material of homogenous strength is manufactured by sawing, milling and drilling to provide optional forms of the constructed material.
7. The method as claimed in Claim 3, wherein after drying, the surfaces adjoining the mold walls are cut off and a construction material of homogenous strength is manufactured by sawing, milling and drilling to

provide optional forms of the constructed material.

8. The method as claimed in Claim 1, wherein the increased strength lightweight concrete is sawn into heat insulating panels.
9. The method as claimed in Claim 2, wherein the increased strength lightweight concrete is sawn into heat insulating panels.
10. The method of Claim 3, wherein the increased strength lightweight concrete is sawn into heat insulating panels.
11. The method of Claim 5, wherein the increased strength lightweight concrete is sawn into heat insulating panels.
12. The method as claimed in Claim 5, wherein cutting and sawing of the construction material is provided by moving an endless coarse steel wire in a longitudinal and transverse direction of the workpiece
13. The method as claimed in Claims 8, wherein cutting and sawing of the construction material is provided by moving an endless coarse steel wire in a longitudinal and transverse direction of the workpiece
14. The method as claimed in Claim 5, wherein the construction material is formed as blocks having holes in them, and the form blocks joined to each other by tongue-and-groove connection, thereafter, the holes within the form blocks are filled with concrete and with this, the form blocks are used as formwork blocks of different performance walls and floors.
15. The method as claimed in Claim 8, wherein the construction material is formed as blocks having holes in them, and the form blocks joined to each other by tongue-and-groove connection, thereafter, the holes within the form blocks are filled with concrete and with this, the form blocks are used as formwork blocks of different performance walls and floors.
16. The method as claimed in Claim 12, wherein the construction material is

formed as blocks having holes in them, and the form blocks joined to each other by tongue-and-groove connection, thereafter, the holes within the form blocks are filled with concrete and with this, the form blocks are used as formwork blocks of different performance walls and floors.

- 5 17. The method as claimed in Claim 16, wherein before filling with concrete, reinforcing steel rods are inserted into the holes of the form blocks.

2007-04-04 10:04:00